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|--|---|---|------------------|
| | Application No. | Applicant(s) | , |
| Notice of Allowability | 10/624,687 | LEE ET AL. | |
| | Examiner | Art Unit | |
| | Tuen N. Neuwon | 2020 | |
| | Tuan N. Nguyen | 2828 | |
| The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.31 | S (OR REMAINS) CLOSED in (i) or other appropriate comm (RIGHTS). This application is: | n this application. If not included unication will be mailed in due could | rse. THIS |
| 1. This communication is responsive to <u>12/14/2005</u> . | | | |
| 2. The allowed claim(s) is/are <u>1-24</u> . | | | |
| 3. Acknowledgment is made of a claim for foreign priority u | inder 35 U.S.C. § 119(a)-(d) | or (f). | |
| a) ⊠ All b) ☐ Some* c) ☐ None of the: | | | |
| 1. Certified copies of the priority documents hav | e been received. | | |
| 2. Certified copies of the priority documents hav | | on No. | 1 |
| 3. Copies of the certified copies of the priority do | • • | | from the |
| International Bureau (PCT Rule 17.2(a)). | | | |
| * Certified copies not received: | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDON! THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | e a reply complying with the require | ements |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give | | | CE OF |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mu | st be submitted. | | |
| (a) I including changes required by the Notice of Draftsper | son's Patent Drawing Review | w (PTO-948) attached | |
| 1) hereto or 2) to Paper No./Mail Date | | | |
| (b) Including changes required by the attached Examiner Paper No./Mail Date | 's Amendment / Comment or | r in the Office action of | |
| Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in | ` · · · | • | k) of |
| 6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT | | | the |
| | | | |
| Attachment(s) | | | |
| 1. Notice of References Cited (PTO-892) | | formal Patent Application (PTO-15 | 2) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | _ | ummary (PTO-413), /Mail Date | |
| 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date | <u> </u> | Amendment/Comment | |
| 4. Examiner's Comment Regarding Requirement for Deposit | 8. 🛭 Examiner's | Statement of Reasons for Allowan | ice |
| of Biological Material | 9. 🗌 Other | _• | |
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REASON FOR ALLOWANCE

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance - Applicant's response filed on 12/14/2005 has been considered, with respect to claim 1 the references of the record fail to teach or suggest:

Claim 1:

A semiconductor optoelectronic device comprising an active layer between the upper and lower waveguide, having an upper and lower cladding on the upper and under lower waveguide layer, and an upper and lower optical confinement layers between the active layer and the upper waveguide layer and between the active layer and lower waveguide layer, respectively, and having an energy gap that is smaller than those of the upper and lower waveguide layers but greater than that of the active layer.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (571) 272-1948. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harvey Minsun can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan N. Nguyen

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